

# The Relationship Between Space Field and Real Space in Art

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## ABSTRACT

No art can exist without the limitation of time and space. As a manifestation of the entity, the space of art is an important condition hidden behind the form of expression, which also restricts the appearance and form of artistic works. The understanding of space has directly changed the face of art, especially painting. This paper discusses the changes of the spatial expression of Western art, from the gradual transformation of the early art from imitation to forming unique and multivariate space ideas, to representing the cognition of the world in a new space that does not exist. This paper attempts to enlighten new artistic expression methods and cognition through the interpretation of space in art.

**Keywords:** art space, space view, traditional art, cyberspace

## I. INTRODUCTION

Art recognizes the existence of space in the process of pursuing the charm of expression. Space includes not only the living space of human beings, but also the pursuit and idea of art. Its value gradually rises to a world view, which continuously affects man's ability to understand the world in the history of human development. The inheritance of artistic works defines the boundary of culture. Chinese culture and Western culture coincidentally construct the expression of space as part of the core value identification of art. With the breakthrough of human means of transportation and architectural tools, space is constantly expanding and changing, and the art form is also updating and iterating, forming a new space art form.

## II. THE FORMATION AND DEVELOPMENT OF SPACE VIEW IN TRADITIONAL ART

The traditional aesthetic idea determines that art as a way of understanding and summarizing the world has long existed, seeking to record an object, to express the causes and consequences of a story, to introduce an imaginary world, and to describe a form defined as "beauty". These works of art have become an important standard of value for conveying emotions and expressing aesthetics. This emphasizes the function of art to express human cognition. Painting, as a means of people's cognition of the world, began in the Renaissance of the 15th century and was widely concerned because of the Impressionism of the 19th century. Art's being a means of understanding and interpreting the world by the artist, sensitive discoverer, defines the cognition-oriented function of it. The artist

has sensitively explored forms of cognition, forming art forms that we are familiar with but unable to generalize. The artist, like the discoverer of nature, sees the world as it is and how it works. All the great painters in the history of art have possessed such duties and talents. Leonardo Da Vinci described the meaning of painting and sculpture in art as "teaching people to learn to see".

The early representation of space can be traced back to the landscape paintings, which the Romans painted in their houses in the style of decoration and expression. This tradition continued to be summarized and developed in the Renaissance until the 19th century, when it was expanded in impressionism and realism, and the description of three-dimensional characteristics in two-dimensional plane became the center of spatial form.

In the Renaissance, the theoretical understanding of space became the core concept of traditional aesthetics by combining the tacit understanding between painting and philosophy. In painting, watching, feeling, expressing and voicing inner feelings are combined together, which gives painting more expressive sensibility and allows it to bear the function of spiritual power with the help of expression carrier. This function is formed on the unshakable basis of spatial view in Western painting. The core of space view is to recognize and discover the world. The classical view of space is to return what is seen to what is known. Optical illusion is the central means of vision in Western classicism. As described in Dialogues of Plato, "The use of pictures in virtue of light and shadow and different distances exploits this weakness of the human heart to produce its magic, and so do things like illusions. This is a contradiction between what is seen

and what is known." A typical representation is Giotto's work.

The classical view of space in painting uses the theory known as perspective, which is generally believed to be formed in 1435 when Alberti developed the discovery of architect Brunelleschi in "On Painting" ("Della Pittura"). This discovery laid the foundation for modern visualization. Leonardo Da Vinci inherited this research, and built a set of more specific visual perspective system in the practice of theory and imagination, namely linear perspective, color perspective and air perspective. These concrete and practicable methods have a profound influence on the trend of Western art. Linear perspective is a method of guiding practice formed on the basis of optics and geometry by means of the theoretical system of geometry. Before linear perspective, a scientific and concrete technique, was widely applied, artists used the shortening method for creation on a large scale, but the shortening method was not inducted into geometry. Perspectivism is an effective artistic method to guide theoretical practice in painting. Perspectivism is an important method to transform architecture to an important way to guide Western art, such as painting and sculpture. The emergence of perspective has created many artistic means to form spatial expression, such as air perspective and linear perspective, which are directly applied in the works to promote the relationship between painting and space. Perspectivism is not simply a means of creating visual illusions, but a means of understanding and cognition in the Western world, falling into the category of world outlook.

Chinese painting has formed a set of unique means of expression in the way of expressing space, which benefits from different cognition of the concept of space, presenting the concept of time with multiple viewpoints and flattening to return to space. The uniqueness of this space is summarized in the method of "far-reaching, lofty and flat" summarized by Guo Xi in the Song Dynasty. This unique understanding of space is inseparable from the understanding of time and space in Chinese culture. With the development of the abstraction of western art, the space represented as a planarity also attracts western artists to study and explore it.

### **III. SPATIAL DEPTH CREATED BY THE TWO-DIMENSIONAL SPACE DEVELOPED BY PERCEPTUAL KNOWLEDGE**

With the development of the times, the space in traditional Western art is no longer enough to express the world of people with constantly changing cognition. New space is constantly learned in philosophy, psychology and other fields, and its important value is no less than that it even determines the function of human cognition of real space in reality. With the

development of scientific knowledge and the substitution of photography and other technical means for the function of three-dimensional imitation, artists need new fields to express the world. It was after Cezanne that the change in space was recognized as an influence on the formation of "seeing". Cezanne develops the concept of space in perceptual cognition by recognizing the form of space with "innocent eye". Cezanne's understanding of space and color brings new vigor and vitality to easel painting. Two-dimensional properties appear in paintings. By splitting viewpoints, visual experience of observation is increased, and the limitation of fixed viewpoints is broken with the feeling impression, which expands the two-dimensional composition, and planarization and geometry become his most significant image characteristics. Cezanne conveys his understanding of sketch and color, which is in fact the contradiction between the sensibility of reality and the three-dimensional spatial perspective of painting. 'Sketch and color are inseparable,' Mr. Cezanne says. When you paint with color, you are sketching, too. The more harmonious the colors are, the more accurate the sketch is. When the color is rich enough, the form will be fully reflected. Contrast and cohesion in tones — here you get the secrets of sketching and stereoscopic modelling.<sup>1</sup> Cezanne's color inspired impressionism and his pursuit of geometry inspired cubism.

The perceptual reality makes the art space return to the reality of what is seen. The artist Giacometti in the 20th century seized the experience of visual feeling and made the space become a philosophical problem. Giacometti described his treatment of space as "trimming away the fat of space". The interwoven lines and scattered grays in his works present the exploration of deep space, which dissolves the objective space and constructs the empirical space view. Giacometti's transformation of the space came from the sketching class given to him by his father, a painter, but Giacometti's experience in phenomenological cognition guided his practice. He said it directly, "My father, for example, draws objects to their original size very instinctively in his sketching, even when I was modeling for him from three meters away. If he draws a pile of apples on the table, he draws them to their full size. Once, when I was about eighteen or eighteen, in his studio, at a normal distance for a still life, I sketched some pears on the table. These pears kept getting smaller. I had to draw it all over again, and it came back to the same size. My father was very angry and said, 'Draw them exactly the size you see them!' Then he changed the pear in the picture. I tried to do what my father wanted me to do, but I couldn't stop changing. I kept erasing and starting over, and an hour and a half later they were exactly the same size as the original

<sup>1</sup> Selected Works of Representational Painting, p68.

miniature size."<sup>2</sup> The space explained by Giacometti in the picture and even in sculpture is undoubtedly philosophical or even sociological. Such space concerns the relationship between human beings and the society, which naturally attracts the attention of existentialist philosopher Sartre.

#### **IV. REAL SPACE BECOMES THE MOST DIRECT FIELD OF ART**

Contemporary art develops and expands the forms of real world space and art space. Extensive and pluralistic space is involved in the transformation of space by art. Space can be site, location, coordinates, cognition, network, etc.; it can either be real or virtual, or even imaginary. The artistic concept of space has changed from three dimensions to two dimensions and then expanded to multiple dimensions. Space is the foundation of all art products that cannot be ignored.

"Landscape art", also widely known as "earth art", is an art form that directly applies space. The artists Christo and Jeanne-Claude have been known to create a series of works of Land Art since 1962. It included the first "Iron Curtain", the famous "Wrapping Around the Reichstag (Wrapped Reichstag)" from 1971 to 1995, and the "Surrounded Islands" (1983) in Miami. Their works changed the way people observed the world and even changed the world, which formed a new field of art for artists in the second half of the 20th century, breaking the distance between art space and real space.

The "Land Art" represented by Christo and Jean-Claude is an art that takes space as the form directly, nature as its basic component element, and field as an important form of works. The concept of space overlaps and penetrates with the concepts of vision, function, culture and humanity, which also makes space stand out and become the expression of the main carrier of art.

Why is the site so valuable? The cultural appeal behind the artist cannot be separated from the original value of the space, which leads to more and more artistic works, especially the installation, behavior and other art forms relying on ready-made products with natural spatial structure. Cai Guoqiang was an artist in the late 1980s who studied stage art. In his early works, traditional Chinese fireworks and two-dimensional plane were combined to form an abstract vertical feeling of the picture. In his later works, fireworks with Chinese culture as the carrier were placed in a geographical location with the meaning of humanity, so as to form a close combination of space and art. For example, his 2006 work "Cai Guoqiang: Hitting the Wall", and his 2015 work "Cai Guoqiang: Ladder" based on the artist's ancestral home.

The space has a natural ecological attribute, which sets a place apart. Only those who are in the space or familiar with the field can understand the meaning behind the space, which makes it better meet the expression of "spirit" in contemporary art. While interpreting cultural connotations, contemporary art is no longer confined to easel painting, photography, sculpture and other crafts. The breakthrough presentation of space has introduced media into the field of art processing. Expanding visual and experiential approaches make it possible for new technologies to serve production and presentation in a variety of ways. The penetration of the Internet and its world culture, and the proliferation of cultural diversity, have made more imaginative visual experiences a fascinating topic. American art critic Clement Greenberg defines such works as formalism works of art, which gives rise to a series of subsequent modernist, postmodernist and other artistic creations that focused on the human problems brought about by the space field and focused on social structure, science and technology, media, ideological trend and other concerns. Invisible or unbounded space has been expanded into a new space in the field of art. Such space can even be virtual, but it has a real impact on people's life.

#### **V. THE ART OF ALIENATION REACTING TO REAL SPACE**

In the 21st century, science and technology have become an important means for human beings to change nature and dissimilate mankind. The rapid development of technology has provided opportunities for the continuous expansion of material civilization and space. Facing various crises, natural ecology has become a global problem, threatening human development. Human beings urgently need to seek new space. While expanding the outer space, they have placed high hopes to the virtual world. The 21st century is a world of science and technology. Human beings survive through the innovation of knowledge and technology. While solving new problems of existence, technology is also constantly improving. The development of computer and application technology has formed a new "artificial limb" of human society. The combination of communication technology and Internet technology has created a new world — Cyberspace. The "cyber space", which originated from the novel, is a virtual world based on the network, which is also called "different dimensional space" or "multi-dimensional space". Cyber space connects all terminals in the world, becoming a space dimension that cannot be ignored at present and creating novel forms of artistic expression. Human beings create different dimensional space and breed virtual space that does not exist, yet the influence of which on the real living space cannot be ignored. At the moment when

<sup>2</sup> Selected Works of Representational Painting, p122.

the world is facing the pandemic crisis in 2020, the impact of virtual space on real space has risen to an extremely important position.

More artists pay attention to the unavoidable space composition in today's world. The art form produced in this space has different external forms from the real world, but has a broader extension method. Completely different from previous art works, many virtual works present a large number of technologies and machines, and realize their artistic means through interactive methods. Chinese artist Miao Xiaochun's "The Last Judgement in Cyberspace" first exhibited in Shanghai in 2006, is a work made entirely on the basis of information technology. Once the work was exhibited, it attracted wide attention. It is by virtue of the combination of the new technical form and the visual experience generated by traditional painting that, the Oriental artist, make it to reinterpret the works of western masters, whose spiritual value forms a new visual experience in the information space. His works have been displayed in many traditional art museums such as the National Art Museum of China. The work is 15 meters high and 12 meters wide. Its display mode mimics the original space in the Vatican to create a strong sense of oppression for the audience. This new media work, which originates from Michelangelo, is the artist's adaptation and recreation of the spiritual value borne by the heavyweight works of art history. Technology has realized the reconstruction of art form and brought new visual and cognitive experience.

## VI. CONCLUSION

Space is to art what earth is to plants. The visual cognition on which western art exists came from space at first, and this kind of cognition gradually expands into aesthetic view, and then forms part of its world view. With the change and deepening of spatial understanding, the planar two-dimensional space has been explored. Flattening is not equal to simplification, but expands the new field of human cognition. With the progress of technological means and the expansion of vision, art has been able to influence and even predict the space world from multiple perspectives. Art is no longer limited to local space but extends to every corner of the real world. Technology has opened the door to a new world for virtual space, and art has achieved a new breakthrough through the exploration of humanistic spirit. The change of space field in art and real space complement each other and constitute the form of today's art.

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